

From: James Nelson
To: Phil Hailes
Date: 12/12/02 7:07AM
Subject: Fwd: FW: IPSC Steel Modifications re: OFA Duct Work

>>> "Dvorak, Douglas A. (Doug)" <DvorakDA@bv.com> 12/11/02 03:37PM >>>
James,

Attached is a pdf file containing QA verified H-brace modifications for the NE, NW, and SE corner bays.

<<NE_NW_SE_H-Brace_Mods.pdf>>

Please note that the general notes refer to existing drawings (S6901 and S6924) that the Contractor/Steel Detailer will need to have a copy of for material and connection information. The QA verified H-brace modifications for the SW corner bay will be completed and sent to you by mid to late morning tomorrow.

As you requested today, I will take a quick look at the following two items tomorrow morning:

1. Moving the workpoint of the new h-braces for the NE, NW and SE corner bays to increase available space on top of FD duct. The work point will need to move approx. 4 ft to clear the top of duct envelope. This decreases the short angle of the one h-brace to only approx. 23 degrees.

2. Checking the cave storage index for potential to find the existing FD duct drawings and expansion joints.

Let me know if you have any questions or comments on the above modification sketches.

Thanks -- Doug

> -----Original Message-----

> From: Dvorak, Douglas A. (Doug)
> Sent: Tuesday, December 10, 2002 10:55 AM
> To: 'jim-n@ipsc.com'
> Cc: 'phil-h@ipsc.com'; Morrow, John S.
> Subject: FW: IPSC Steel Modifications re: OFA Duct Work -- B&V
> Proposal
> Importance: High
>
> James,
>
> Confirmation on our discussion that B&V has been verbally authorized to
> proceed with the design of the SW and SE corners. As requested, the NE
> and NW corner design sketches will be sent to you and Phil electronically
> by tomorrow (Wednesday). B&V will make every effort to complete the
> detailed design and send the design sketches for the SE and SW corners by
> tomorrow, but it may run over into Thursday due to the timing of the
> authorization to proceed. B&V understands that Babcock/Borsig will have
> somebody at the plant the next couple of days (Wed / Thur) to work on the

> duct routing for the over-fire air duct modifications and would like to
> have the B&V detailed steel modification design sketches for reference.
>
> Let me know if you have any questions or need any additional information.
>
> Thanks -- Doug
>
> -----Original Message-----
> From: Dvorak, Douglas A. (Doug)
> Sent: Monday, December 09, 2002 12:43 PM
> To: 'jim-n@ipsc.com'
> Cc: 'phil-h@ipsc.com'; Morrow, John S.
> Subject: FW: IPSC Steel Modifications re: OFA Duct Work -- B&V
> Proposal
> Importance: High
>
> James,
>
> Attached is the conceptual sketch of the SW corner. A rough and
> indicative cost estimate of the SW corner is \$40,000.
>
> <<SW_Corner_Bay.pdf>>
> Please advise if B&V is authorized to proceed with detailed design of the
> SW and SE corners. We will need to know by the end of today to complete
> the detailed design sketches for the SW and SE corners by Wednesday of
> this week.
>
> Thanks -- Doug
>
>
> -----Original Message-----
> From: Dvorak, Douglas A. (Doug)
> Sent: Friday, December 06, 2002 5:45 PM
> To: 'jim-n@ipsc.com'
> Cc: Morrow, John S.
> Subject: FW: IPSC Steel Modifications re: OFA Duct Work -- B&V
> Proposal
>
> James,
>
> A quick update on where I'm at day's end on Friday.
>
> SW Corner -- On target to have conceptual sketch send to you by mid to
> late Monday morning. I need to run some numbers to prove out the
> arrangement I'm looking at before I send you the sketch. If numbers prove
> out the arrangement, on target to complete detailed design sketches, QA
> checked by Wed of next week.
>
> NE and NW Corner -- On target to complete detailed design sketches, QA
> checked by Wed. of next week.
>
> SE Corner -- On target to complete detailed design sketches, QA checked
> by Wed. of next week.
>
> Have a good weekend.
>

> Regards -- Doug

>

> Douglas A. Dvorak, PE (Doug)

> Project Civil-Structural Engineer

> Black & Veatch Corporation

> Tel: 913-458-7534

> Fax: 913-458-2934

> e-mail: dvorakda@bv.com

> Location: P3H2

>

> -----Original Message-----

> From: Morrow, John S.

> Sent: Friday, December 06, 2002 7:40 AM

> To: 'James H. Nelson (jim-n@ipsc.com)'

> Cc: Dvorak, Douglas A. (Doug); Morrow, John S.

> Subject: RE: IPSC Steel Modifications re: OFA Duct Work -- B&V

> Proposal

>

> James -- a quick response to you voice messages yesterday afternoon and

> evening --- I received both voice messages, which stated that you have

> received approval from staff and verbally authorized us to proceed, and

> that you are getting the PO processed asap. I have directed Doug to start

> work as of late yesterday afternoon.

>

> I will be in meetings all morning today, but please feel free to call and

> page me if you need to. Also, please feel free to contact Doug directly

> re: this assignment; Doug can be reached at 913-458-7534.

>

> Thanks. JOHN.

>

> -----Original Message-----

> From: Morrow, John S.

> Sent: Thursday, December 05, 2002 3:52 PM

> To: James H. Nelson (jim-n@ipsc.com)

> Cc: Morrow, John S.; Dvorak, Douglas A. (Doug); Marek, Mark W.; Schmidt,

> Dan L.

> Subject: FW: IPSC Steel Modifications re: OFA Duct Work -- B&V Proposal

>

>

> James -- attached is an electronic copy of our revised proposal; I am also

> faxing a copy of the revised proposal to you. The proposal has been

> revised based on our telephone conversation this afternoon (~3pm CST).

> The modifications are:

>

> 1) to show new items d (QA check) and e (submittal of detailed design to

> IPSC) to the scope of services ---- this work was already included, but I

> have added them as specific items to show the QA check done early, to

> allow your submittal to Borsig for their fabrication and procurement; and

>

> 2) to change the completion dates for items a through e to next Wednesday,

> December 11, and for items f, g, and h to January 3.

>

> Let me know as soon as possible when you have George Cross's authorization

> for us to proceed.

>

> Regards. JOHN.

>
>
>
> -----Original Message-----
> From: Morrow, John S.
> Sent: Thursday, December 05, 2002 11:00 AM
> To: 'James H. Nelson'
> Cc: Morrow, John S.; Dvorak, Douglas A. (Doug); Marek, Mark W.; Schmidt,
> Dan L.
> Subject: IPSC Steel Modifications re: OFA Duct Work -- B&V Proposal
>
>
> James -- attached for your convenience is an electronic copy of the
> proposal I am faxing to you this morning. Also find below notes from our
> phone conversation last night.
>
> Let me know if you have any questions or comments. I look forward to
> receiving your authorization to proceed. Doug should be able to spend
> time on the first task very quickly after we receive your authorization
>
> Regards. JOHN.
>
>
> -----Original Message-----
> From: Morrow, John S.
> Sent: Thursday, December 05, 2002 8:42 AM
> To: Dvorak, Douglas A. (Doug)
> Cc: Morrow, John S.
> Subject: FW: Request authorization to issue tickets for Douglas Dvorak
>
>
> The following are phone notes from Wednesday, December 4, 2002 @ ~4:45 pm
> CST. The phone call included:
> o IPSC: James Nelson and Phil Hailes
> o B&V: Doug Dvorak and John Morrow
>
> The phone call was regarding the structural modifications in the IPP
> boiler buildings, to revise/replace some diagonal, horizontal steel
> members to allow for installation of duct work associated with the
> overfired air (OFA) system.
>
> We discussed the various corners of the boiler. The NW and NE corners
> would be the same; the SE corner could also be the same as the NW and NE
> corners, except that James and Phil are want to maintain symmetry on the
> SW and SE corners due to their concern about air balance to the OFA system
> and the burners below.
>
> Doug Dvorak's previous estimates (see below) for the cost of steel
> modifications was discussed. (Doug's estimate, including material and
> installation, was \$20k each for the NW, NE, and SE corners, and \$80K for
> the SW corner.) Doug characterized these estimates as rough and
> indicative amounts. He commented that the \$80K value was a pretty rough
> cut, based on the complexity; he said it (\$80k) was determined by assuming
> that 4 times the other corners would be sufficient, if the modification
> could be made. Doug commented that he felt this number was sufficient and
> likely on the high side, to make sure he did not underestimate the amount.

>
> The following was discussed as our steps to proceed:
>
> 1) B&V provide a proposal to IPSC for the design modifications.
> NOTE: I told James I should be able to provide this to him Thursday
> morning. The proposal should include scope, cost, and schedule. Refer to
> the email below.
>
> 2) James Nelson will carry the B&V proposal to George Cross (IPSC
> president and plant manager) for approval, and then he will inform B&V
> with authorization to proceed. He will get a requisition written right
> away.
>
> 3) The priority and succession for the work would be as follows:
>
> 3a) Further investigate (without detailed design) the cost of the SW
> corner modifications.
> 3b) IPSC will communicate with Borsig, and will determine whether this
> modification (which would be applied to both the SE and SW corners) should
> be pursued.
> 3c) Provide the detailed design (sketches) for the NE and NW corners.
> 3d) Provide the detailed design (sketches) for the SE and SW corners, if
> requested by IPSC.
> 3e) Provide the formal (PE signed/sealed) detailed design drawings (for
> fabrication and installation) for the revised steel.
>
> James stated that we have some time to accomplish this, and that it is not
> as big a push; we have the best part of this month to complete it. Doug
> indicated that step 3a could be accomplished by this Friday or Monday,
> based on immediate release.
>
>
> -----Original Message-----
> From: Morrow, John S.
> Sent: Wednesday, November 27, 2002 5:44 PM
> To: 'James H. Nelson'; 'phil-h@ipsc.com'
> Cc: Morrow, John S.; Marek, Mark W.; Dvorak, Douglas A. (Doug); Morrow,
> John S.
> Subject: RE: Request authorization to issue tickets for Douglas Dvorak
>
>
> James --- Doug Dvorak and I talked today about his trip to your site
> yesterday. It sounds like a very successful trip: apparently he was able
> to find a method to revise the steel at 6 of the 8 locations, and he may
> be able to devise a method to modify the other 2 as well.
>
> Below are the following:
> O Doug's Trip Summary
> O Doug's preliminary order-of-magnitude cost estimate
> O Our estimate for the engineering effort
>
> As you, Doug, and I discussed on the phone this afternoon (~4:30 pm MST,
> 11/27/02), you will be having a conference call with Borsog to discuss
> this information, and how it changes their work. Per your direction, we
> will stop work until we hear otherwise from you. Doug has time available
> during the week few weeks to work in this design, if you decide to

> proceed.
>
> Have a great Thanksgiving. Let us know how we can help you. Regards.
> JOHN
>
>
> =====
> =====
>
>
> TRIP SUMMARY - 25 Nov 02 / 26 Nov 02:
> Arrived at Plant at approx. 7:30 am on 26 Nov 02.
>
> Met with James Nelson and Phil Hailes of IPSC for an overview of the
> over-fire duct modifications and discussion to investigate the potential
> to modify select H-braces at EL 4803'-5" as a potential alternate option
> for reducing the cost of the over-fire duct modification work. The
> potential alternate option would consist of tying the new sections of
> over-fire duct (approx. 64 sf x-section area) into the top of the existing
> FD ducts just below the steel framing at EL 4803'-5". The select h-braces
> have significant load carrying capacity and cannot be permanently removed
> without an alternate design to transfer the lateral loads through the bays
> to the vertical bracing system.
>
> Walked down and took photos of the 4 Unit 1 areas to investigate the
> potential to modify the H-braces in the following bays:
>
> 1. NE Corner Bay -- Column Rows 102 to 103, L to K at EL 4803'-5" (Ref
> Drawing 9255-1BSA-S6094 Rev 8) 2. SE Corner Bay -- Column Rows 102 to
> 103, H to J at EL 4803'-5" (Ref Drawing 9255-1BSA-S6094 Rev 8) 3. NW
> Corner Bay -- Column Rows 107 to 108, L to K at EL 4803'-5" (Ref Drawing
> 9255-1BSA-S6095 Rev 7) 4. SW Corner Bay -- Column Rows 107 to 108, L to
> K at EL 4803'-5" (Ref Drawing 9255-1BSA-S6095 Rev 7)
>
> Drew up preliminary sketches of an option to modify the NE and SE corner
> bay h-bracing at EL 4803'-5". (Scanned copies attached.)
>
> Walked down the NW and SW corner bays to verify these areas were a mirror
> image of the NE and SE corner bays. The NW was essentially a mirror of
> the NE, but the SW corner bay has an existing FWA pipe (vertical) near the
> H-brace at column H / 107 that prohibited using the same modification as
> the SE corner bay. Alternate possible h-bracing modifications are being
> investigated that if technically possible, are expected to be
> significantly more costly than the h-brace modifications for the other 3
> corner bays.
>
> Briefed James and Phil on the potential to modify the h-braces in each of
> the four corner bays. Agreed to check if B&V has copies of the FD duct
> drawings to determine expansion joint locations, duct stiffeners, etc.
>
> Departed from Site at approx. 12:45 pm to return to KC for the follow-up
> office work.
>
> =====
>
> PRELIMINARY ORDER OF MAGNITUDE COST ESTIMATES

- >
- > Preliminary Order of Magnitude Cost Estimate for Unit 1 H-Brace
- > Modifications (Material and Installation):
- > 1. NE Corner -- Column Rows 102 to 103, L to K at EL 4803'-5" (Ref
- > Drawing 9255-1BSA-S6094 Rev 8): \$20,000
- > Remove Existing W14x233 H-brace
- > Fabricate and install the 2 new H-braces
- > Fabricate and install the new H-brace connection
- > Modifications for the existing H-brace connections for the new H-braces at
- > column K / 103 and L / 103.
- >
- > 2. SE Corner -- Column Rows 102 to 103, H to J at EL 4803'-5" (Ref
- > Drawing 9255-1BSA-S6094 Rev 8): \$20,000
- > Remove Existing W14x145 H-brace
- > Fabricate and install the 2 new H-braces
- > Fabricate and install the new H-brace connection
- > Modifications for the existing H-brace connections for the new H-braces at
- > column H / 103 and J / 103.
- >
- > 3. NW Corner -- Column Rows 107 to 108, L to K at EL 4803'-5" (Ref
- > Drawing 9255-1BSA-S6095 Rev 7): \$20,000
- > Remove Existing W14x233 H-brace
- > Fabricate and install the 2 new H-braces
- > Fabricate and install the new H-brace connection
- > Modifications for the existing H-brace connections for the new H-braces at
- > column K / 107 and L / 108.
- >
- > 4. SW Corner -- Column Rows 107 to 108, L to K at EL 4803'-5" (Ref
- > Drawing 9255-1BSA-S6095 Rev 7): \$80,000
- > Alternate possible H-bracing modifications are being investigated that if
- > technically possible, will be significantly more costly than the h-brace
- > modifications for the other 3 corner bays. Estimate potentially up to 4
- > times the estimated cost for each of the other 3 corners as an order of
- > magnitude.
- >
- > UNIT 1 TOTAL ESTIMATE \$140,000
- > UNIT 2 TOTAL ESTIMATE \$140,000
- > TOTAL \$280,000
- >
- > The above preliminary order of magnitude estimated costs do not include
- > the following costs:
- > O Potential savings to field modify existing h-braces for re-use.
- > O Installation equipment to hoist the materials to the EL 4803 level
- > (assumed sufficient hoisting equipment would be available as part of the
- > over-fire duct mod work package).
- > O Relocation of the boiler ventilation duct for the over-fire duct
- > mods (assumed to be removed as part of the over-fire duct mod work
- > package)
- > O Removal / relocation of the access platforms at EL 4804'-9 3/8"
- > (assumed to be removed as part of the over-fire duct mod work package)
- >
- > The H-brace modification cost estimate will be finalized after detailed
- > design is completed.
- >
- > =====
- >

> ENGINEERING ESTIMATE:

>
> Initial Investigative Site Trip/Office Follow-up - 24 hours (Nov 25
> thru 27)
> Detailed Design Engineering/Check - 40 hours
> Prepare / Issue Drawings - 24 hours
> Site Visit to Confirm Detailed Design (If req'd) - 24 hours (See Note)
> Total - 112 hours
>
> Including the expenses for both trips (November 25-26, and site visit to
> confirm design), I estimate that the B&V invoices would be \$16000 to
> \$18000.
>
> Note: Additional Site Visit to confirm detailed design for Unit 1 and
> confirm the Unit 1 design will also work for Unit 2.
>
>

> -----Original Message-----

> From: James Nelson [<mailto:JIM-N@ipsc.com>]
> Sent: Tuesday, November 26, 2002 1:21 PM
> To: MorrowJS@bv.com
> Subject: RE: Request authorization to issue tickets for Douglas Dvorak
>
>

> John,

> The requisition for you to proceed with the assessment of structural
> changes associated with our overfire air modifications has been approved
> by our Staff. The purchase order should be on its way to you shortly. It
> is being executed under the new services agreement. Thank you for your
> responsiveness and support on this issue.
>
>

> >>> "Morrow, John S." <MorrowJS@bv.com> 11/25/02 03:14PM >>>
> James -- would you please respond by email with your authorization for us
> to proceed, with the understanding that the paperwork will follow. I
> realize you have verbally authorized us to proceed, and we have in fact
> started (Doug is enroute, already), but I need something from you (email
> is
> sufficient) so I can start our accounting/tracking paperwork.
>

> Thanks. JOHN.

>

> > -----Original Message-----

> > From: Morrow, John S.
> > Sent: Monday, November 25, 2002 12:01 PM
> > To: 'James H. Nelson'
> > Cc: Dvorak, Douglas A. (Doug); Morrow, John S.
> > Subject: RE: Request authorization to issue tickets for Douglas
> > Dvorak
> >

> > James --- as we talked this morning (about noon my time), I swagged
> > the cost for Doug's trip at ~\$3000 (time and expenses). Follow-on
> > engineering to design changes to the steel is not included.
> >

> > Regards. JOHN.

> >

> > -----Original Message-----

> > From: Morrow, John S.

> > Sent: Monday, November 25, 2002 11:49 AM

> > To: 'James H. Nelson'

> > Cc: Morrow, John S.; Dvorak, Douglas A. (Doug)

> > Subject: FW: Request authorization to issue tickets for

> > Douglas Dvorak

> >

> > James ---- good morning. Below is Doug's travel plans. He will be

> > staying tonight at the Best Western in Delta. He plans to arrive at

> > the jobsite at about 7:30 tomorrow morning, and would need to leave

> > the site to go to the airport about noon or early afternoon.

> >

> > Call me if you have any questions/comments. Let me know what you

> > need in order to issue a work authorization. If you'd like, we can

> > wait until Doug has been to the site, so we can estimate his manday

> > effort.

> >

> > If you could, please email us the information re: the duct

> > configurations, so Doug can have that to review on the plane this

> > afternoon. Email it directly to Doug and to me, please.

> >

> > Regards. JOHN.

> >

> > -----Original Message-----

> > From: Dvorak, Douglas A. (Doug)

> > Sent: Monday, November 25, 2002 10:02 AM

> > To: TRAVEL - DOMESTIC - KC (Travel Dept.)

> > Cc: Morrow, John S.

> > Subject: RE: Request authorization to issue tickets for

> > Douglas Dvorak

> >

> > Itinerary is acceptable. Please make the reservations. Project No.

> > / Phase is 831116.1030.

> >

> > Thanks -- Doug

> >

> > -----Original Message-----

> > From: B&V Travel Domestic [SMTP:BandVTravelDom@tandt.com]

> > Sent: Monday, November 25, 2002 9:41 AM

> > To: 'dvorakda@bv.com'

> > Subject: Request authorization to issue tickets for

> > Douglas Dvorak

> > Importance: High

> >

> > Listed below is the itinerary requested. The lowest

> > available

> > roundtrip price is \$ 434.90, refundable. Fares are subject to change

> > without notice and must be ticketed to secure the price.

> >

> > All air travel itineraries that price at \$400 or more are

> > eligible

> > for a more extensive search for a cost reduction. The Travel

> > Department will be searching available Internet Web sites to determine

> > if there is a less expensive airfare. The search criteria will include

> > the same itinerary plus any flights two hours prior through two hours

> > after the desired departure and arrival times. Should a less expensive
> > airfare be found, you will be provided an opportunity to review the
> > alternate itinerary which may have been located in the Web search and
> > it will be your decision regarding acceptance of the Web itinerary.
> >
> > Please review the itinerary and advise if any changes are
> necessary.
> > Notify me when you are ready for tickets to be issued.
> > FOR RESERVATIONS-KANSAS CITY- 913-458-2674
> 730A-530P M-F
> > CST
> > ANN ARBOR - 734-622-8888
> 800A-500P M-F
> > EST
> > AFTER HOURS / WEEKENDS / HOLIDAYS CALL
> 888-368-8227
> > FROM MEXICO CALL 001-888-368-8227
> > FOR INTERNATIONAL CALL COLLECT 402-399-4667
> >
> > SALES PERSON: 62 ITINERARY
> > DATE: 25 NOV 02
> > ECVXXF
> > PAGE: 01
> >
> > TO: BLACK AND VEATCH ENERGY
> > ATTN DOUGLAS A DVORAK
> > P O BOX 8405
> > KANSAS CITY MO 64114
> >
> > FOR: DVORAK/DOUGLAS A REF: BL881466-BL01438
> >
> >
> > 25 NOV 02 - MONDAY
> > OTHER NOTE
> > ETKT CONFIRMATION *2DNN47*, AIRFARE IS 434.90
> REFUNDABLE.
> > ACCESS VIRTUALLYTHERE.COM FOR WEATHER AND MAP INFO
> ON YOUR
> > DESTINATION. USE NUMBER *ECVXXF* TO ACCESS.
> > AIR DELTA AIR LINES INC FLT:1457 COACH
> > LV KANSAS CITY INTL 425P
> > EQP: BOEING 737-800
> > DEPART: TERMINAL BUILDING B
> > 02HR 33MIN
> > AR SALT LAKE CITY 558P
> > NON-STOP
> > ARRIVE: TERMINAL UNIT 2
> > REF: 2DNN47
> > DVORAK/DOUGLAS SEAT-13D DL-2101308175
> > CAR SALT LAKE CITY AVIS RENT A CAR
> > INTER CAR AUTO A/C
> > PICK UP-1758
> > RETURN-26NOV/1625
> > RATE PLAN 1 DAYS 0 HRS USD MI/KM

> > EX MI/KM
> > DAILY RATE 42.50 UNL
> > XTRA DAY- 42.50 UNL
> > XTRA HOUR- 14.18 UNL
> > MANDATORY CHARGES 12.48
> > APPROX RENTAL COST 54.98 UNL
> > CONFIRMATION NUMBER 31835538US0
> > RATE-GUARANTEED
> > CD-A249100 ID-B8D67V
> > HOTEL SALT LAKE CITY OUT-26NOV
> > BEST WESTERN INTL 1 NIGHT
> > BW MOTOR INN 1 ROOM 1 QUEEN
> > BED*
> > 527 E TOPAZ BLVD RATE-44.96USD PER
> > NIGHT
> > DELTA UT 84624 CANCEL BY 06P DAY
> > OF ARRIVAL
> > FONE 435-864-3882
> > FAX 435-864-4834
> > GUARANTEED LATE ARRIVAL
> > CONFIRMATION 145658800
> > NON SMOKING
> >
> >
> > CONTINUED ON PAGE 2
> >
> >
> > FOR RESERVATIONS-KANSAS CITY- 913-458-2674
> 730A-530P M-F
> > CST
> > ANN ARBOR - 734-622-8888
> 800A-500P M-F
> > EST
> > AFTER HOURS / WEEKENDS / HOLIDAYS CALL
> 888-368-8227
> > FROM MEXICO CALL 001-888-368-8227
> > FOR INTERNATIONAL CALL COLLECT 402-399-4667
> >
> > SALES PERSON: 62 ITINERARY
> > DATE: 25 NOV 02
> > ECVXXF
> > PAGE: 02
> >
> > TO: BLACK AND VEATCH ENERGY
> > ATTN DOUGLAS A DVORAK
> > P O BOX 8405
> > KANSAS CITY MO 64114
> >
> >
> > FOR: DVORAK/DOUGLAS A REF: BL881466-BL01438
> >
> >
> > 26 NOV 02 - TUESDAY
> > AIR DELTA AIR LINES INC FLT:2012 COACH
> > LV SALT LAKE CITY 425P

> > EQP: MD-90
> > DEPART: TERMINAL UNIT 2
> > 02HR 23MIN
> > AR KANSAS CITY INTL 748P
> > NON-STOP
> > ARRIVE: TERMINAL BUILDING B
> > REF: 2DNN47
> > DVORAK/DOUGLAS SEAT-20C DL-2101308175
> >
> > PLEASE SEE TRAVEL WEBSITE FOR IMPORTANT CAR
> > RENTAL INSURANCE INFORMATION.
> > AUTO LIABILITY POLICY NUMBERS ARE AS2-641-004177-022
> > AND AS2-641-004177-682
> > WITH POLICY EXPIRATION OF 11 01 03.
> > ----- IMPORTANT INFORMATION -----
> > -DUE TO HEIGHTENED SECURITY AT AIRPORTS CHECK IN-
> > .. 2 HOURS PRIOR FOR DOMESTIC FLIGHTS AND ..
> > .. 3 HOURS PRIOR FOR INTERNATIONAL FLIGHTS. ..
> > -----
> > --VERIFY FREQUENT FLYER NUMBER AT AIRLINE COUNTER--
> > CHANGE OF ITINERARY MAY RESULT IN A FARE DIFFERENCE
> > ALL TRAVELERS MUST PRESENT GOVERNMENT ISSUED ID UPON
> > CHECK-IN ... SUCH AS DRIVERS LICENSE OR PASSPORT
> > REFUNDS MAY TAKE 60-90 DAYS TO PROCES IF APPLICABLE
> >
> >
> >
> >
> >
> >
> >
> >
> > Help Your Company Save Money - Go To
> > <<http://www.bvinettravel.com>>
> > <<http://www.bvinettravel.com>> >
> >
> >
> >



BLACK & VEATCH

Owner IPSC Computed By D.A. Dvank
Plant Intermountain Unit _____ Date 10 Dec 02 20 ____
Project No. 137643 File No. _____ Verified By T. Kruttschnitt
Title Over - Fire Air Duct Modifications Date 12/11 20 02
H-Brace Modifications - General Notes Page _____ of _____

GENERAL NOTES:

1. FOR GENERAL NOTES REFER TO EXISTING DRAWING NO. 9255-9BSU-S6901 REV. 15.
2. FOR HORIZONTAL BRACING CONNECTION DETAILS REFER TO EXISTING DRAWING NO. 9255-9BSU-S6924 REV 10.
3. STEEL AND ASSOCIATED CONNECTIONS INDICATED AS NEW SHALL BE NEW AND UN-USED, UNLESS NOTED OTHERWISE. AT THE CONTRACTOR'S OPTION, NEW HORIZONTAL BRACES MAY BE FIELD CUT FROM EXISTING HORIZONTAL BRACES OF THE SAME SIZE THAT ARE DESIGNATED TO BE REMOVED.
4. CONTRACTOR TO FIELD VERIFY EXISTING STEEL, DUCTWORK, AND ACCESSORIES PRIOR TO FABRICATION AND INSTALLATION OF NEW MATERIALS.
5. REUSE OF EXISTING HIGH STRENGTH BOLTS IS PROHIBITED.
6. NEW HORIZONTAL BRACE MEMBERS AND ASSOCIATED NEW CONNECTION MATERIALS SHALL BE SHOP COATED WITH COATING SYSTEM A1P PRIOR TO ASSEMBLY AND INSTALLATION.
7. FIELD DRILL HOLES IN EXISTING STEEL FOR FIELD BOLTED CONNECTION OF NEW STEEL. AT THE OPTION OF THE CONTRACTOR, FIELD WELDING MAY BE USED AS AN ALTERNATE IN LIEU OF FIELD DRILLING HOLES IN EXISTING STEEL FOR FIELD BOLTED CONNECTIONS OF NEW STEEL. THE CONTRACTOR SHALL SUBMIT PROPOSED ALTERNATE FIELD WELDED CONNECTIONS TO THE ENGINEER FOR APPROVAL PRIOR TO FABRICATION AND INSTALLATION OF MATERIALS.

REVISED, SUPERSEDED, AND VOID CALCULATIONS MUST BE CLEARLY IDENTIFIED, INITIALED, AND DATED BY THE RESPONSIBLE INDIVIDUAL.

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Application	Tank Exteriors, Structural Steel, and Miscellaneous Metals	
Potential Exposure	1A (indoor, normally dry) 1B (outdoor, normally dry)	2A (frequently wet by freshwater) 2B (frequently wet by salt water)
Substrate	Steel	
Surface^{1,2} Preparation	SSPC-SP6 Commercial Blast Cleaning Profile depth 1 to 2 mils (25 µm to 50 µm)	

	<u>First Coat</u> ^{3,4}	<u>Touchup</u> ^{1,4,5}	<u>Second Coat</u>	<u>Third Coat</u>	<u>Completed System</u>
Dry Film Thickness	3-4 mils (75-100 µm)	3-4 mils (75-100 µm)			3-4 mils (75-100 µm)
Generic Product	Inorganic zinc	Inorganic zinc			

Notes:

- 1 Anchor profile to be verified by Contractor using ASTM D4417 Method C.
- 2 Weld profile to be prepared in accordance with NACE RP0178, Replica "E" profile.
- 3 Class B slip coefficient (Specification for Structural Joints Using ASTM A325 or A490 Bolts).
- 4 Do not apply dry film thickness in excess of 4 mils (100 µm) per coat.
- 5 Power tool clean (SSPC-SP3) damaged surfaces only (shop or field applied).

Approved Products

<u>Manufacturer</u>	<u>First Coat</u>	<u>Touchup</u>	<u>Second Coat</u>	<u>Third Coat</u>
Ameron	Dimetcote 9(HS)	Dimetcote 9(HS)		
Carboline	Carbo Zinc 11(HS)	Carbo Zinc 11(HS)		
Hempel	Galvosil 1568	Galvosil 1568		
ICI/Devoe	Catha-Coat 304V	Catha-Coat 304V		
International	Interzinc 22(HS)	Interzinc 22(HS)		
Sherwin-Williams	B69VZ1/B69VZ3/ B69D11	B69VZ1/B69VZ3/ B69D11		
Sigma	Sigma Silguard MC 7551US	Sigma Silguard MC 7551US		

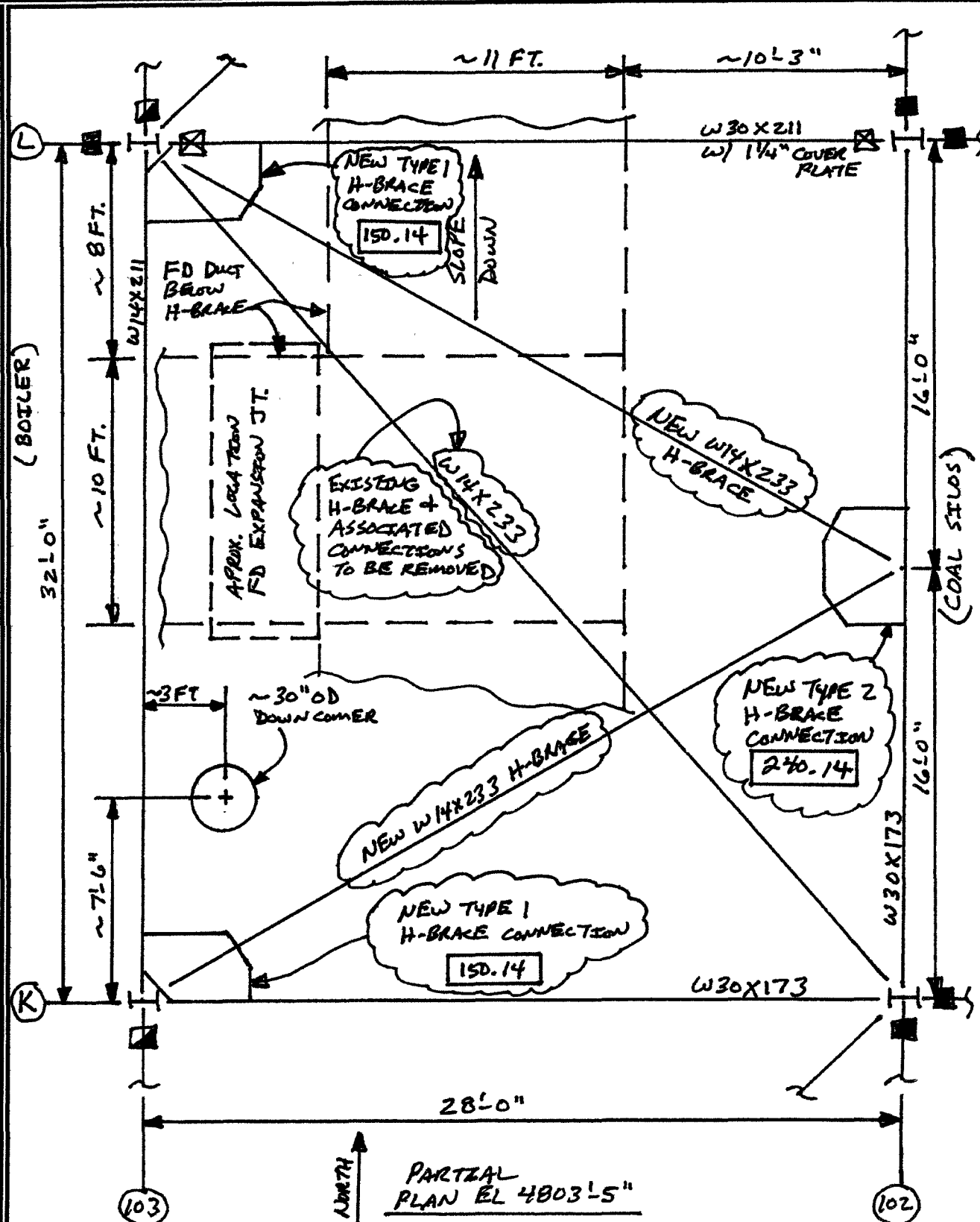
Coating manufacturers and products other than those listed herein are subject to Engineer's review/approval. Coating product data sheets must accompany any request for approval.

						B	06/22/01	Revised Notes	WKD	RHW
						A	12/04/00	Initial Issue	WDK	REB
REV	DATE	REVISIONS AND RECORD OF ISSUE	BY	APP	REV	DATE	REVISIONS AND RECORD OF ISSUE	BY	APP	
BLACK & VEATCH		COATING SYSTEM DATA SHEETS - SYSTEM A1P						Drawing No. 81113-DM-0502		Rev B

Owner IPSC Computed By D.A. Duonk
 Plant Intermountain Unit _____ Date 10 Dec 02 20____
 Project No. 133643 File No. _____ Verified By JL Kratochvil
 Title Over-Fire Air Duct Modifications Date 12/11 2002
NE Corner H-Brace Modifications Page _____ of _____

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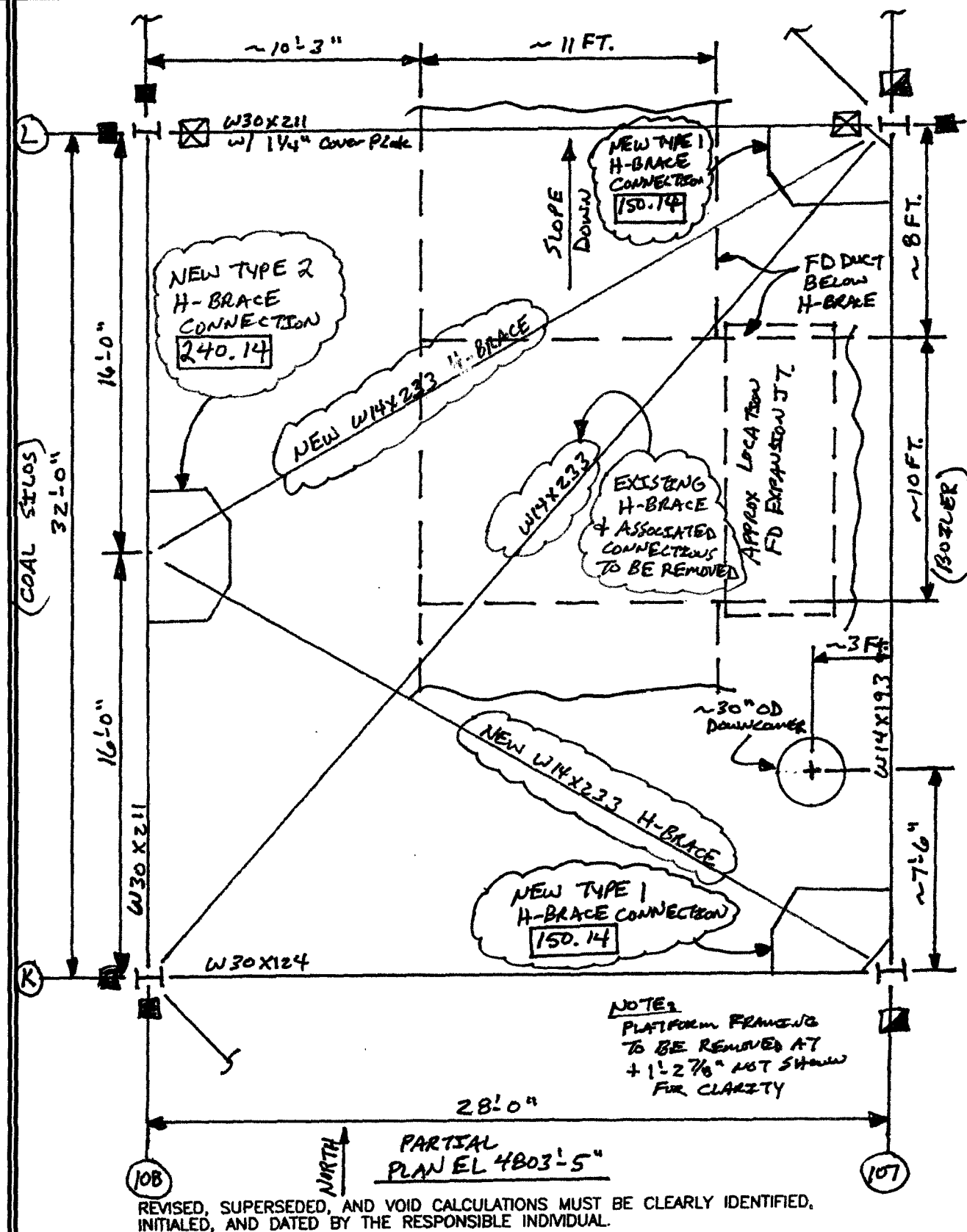


BLACK & VEATCH

Owner LFSC Computed By D.A. Drueck
Plant Intermountain Unit _____ Date 10 Dec 02 20____
Project No. 133643 File No. _____ Verified By T. Kratochvil
Title Over-Fire Air Duct Modifications Date 12/11 2002
NW Corner H-Brace Modifications Page _____ of _____

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PGN-175B



IP7_036479



BLACK & VEATCH

Owner IPSC

Plant Inter maintain

Unit _____

Computed By D.A. Duvrak

Date 11 Dec 02 20

Project No. 133643

File No. _____

Verified By TL Kratochvil

Title Over-Fire Air Duct Modifications

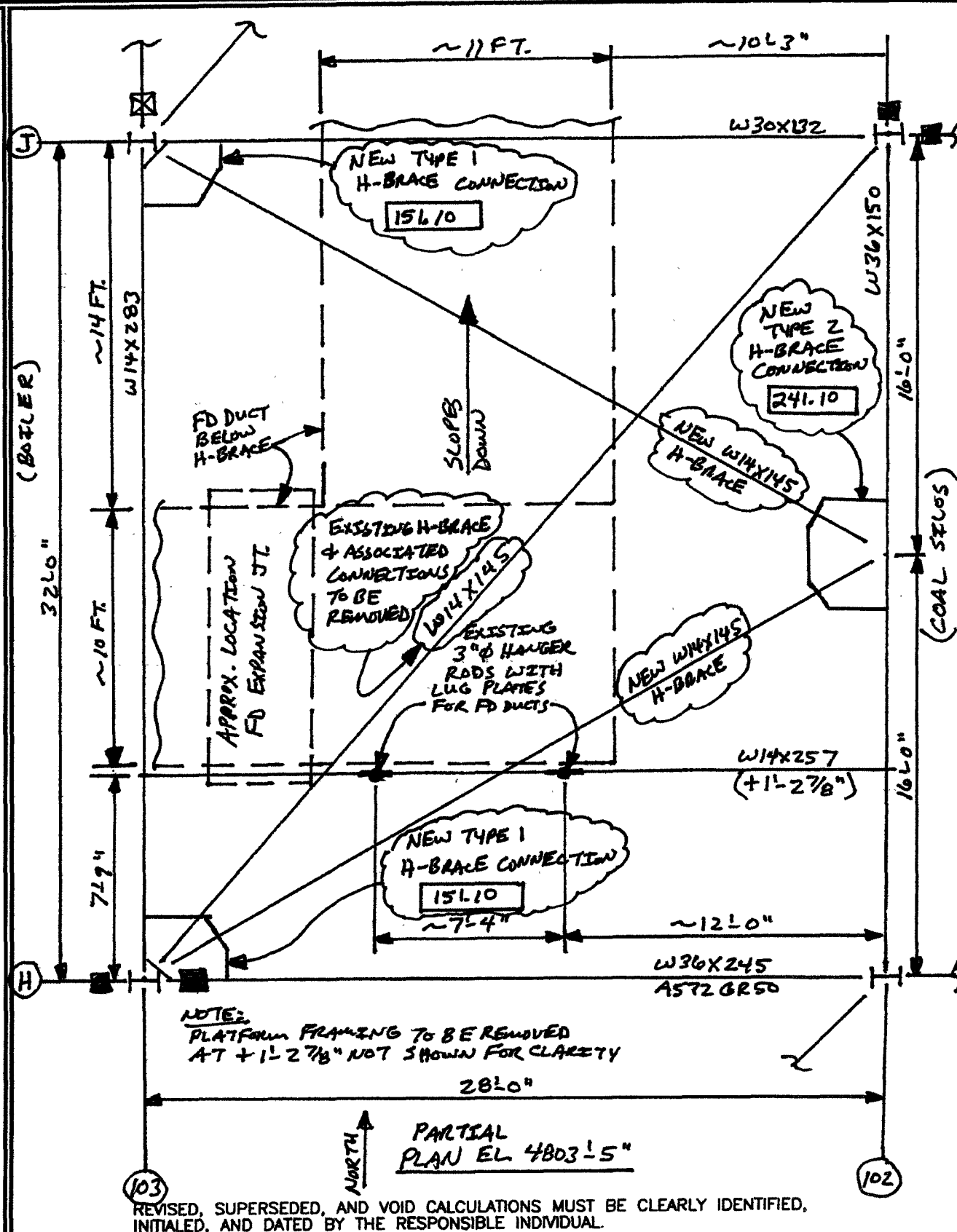
Date 12/11 20 02

SE Corner H-Brace Modifications

Page _____ of _____

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BLACK & VEATCH

Owner IPSC Computed By D.A. Dineale
Plant Intermountain Unit _____ Date 10 Dec 02 20____
Project No. 133643 File No. _____ Verified By TL Kratochvil
Title Over-Fire Air Duct Modifications Date 12/11 2002
H-BRACE Modifications - H-BRACE CONNECTIONS Page _____ of _____

REFER TO EXISTING DRAWING NO. 9255-9851-56924 Rev 10.

TYPE 1					
MARK NO.	N	NO. OF BOLTS IN ANGLE A (*) (MINIMUM)	NO. OF BOLTS IN ANGLE B (*) (MINIMUM)	L1 (MIN.)	L2 (MIN.)
150	14	20	20	30	30
151	8	10	10	21	21

TYPE 2			
MARK NO.	N	NO. OF BOLTS IN ANGLE A (*) (MINIMUM)	L1 (MIN.)
240	14	30	30
241	8	16	21

(*) NOTE:
NO. OF BOLTS LISTED IN TABLE IS THE NUMBER OF BOLTS IN EACH PAIR OF CONNECTION ANGLES OR CONNECTION PLATE. TOTAL NUMBER OF BOLTS IS TWICE THE NO. OF BOLTS LISTED IN THE TABLE (1/2 TOP PL AND 1/2 BOTTOM PL).

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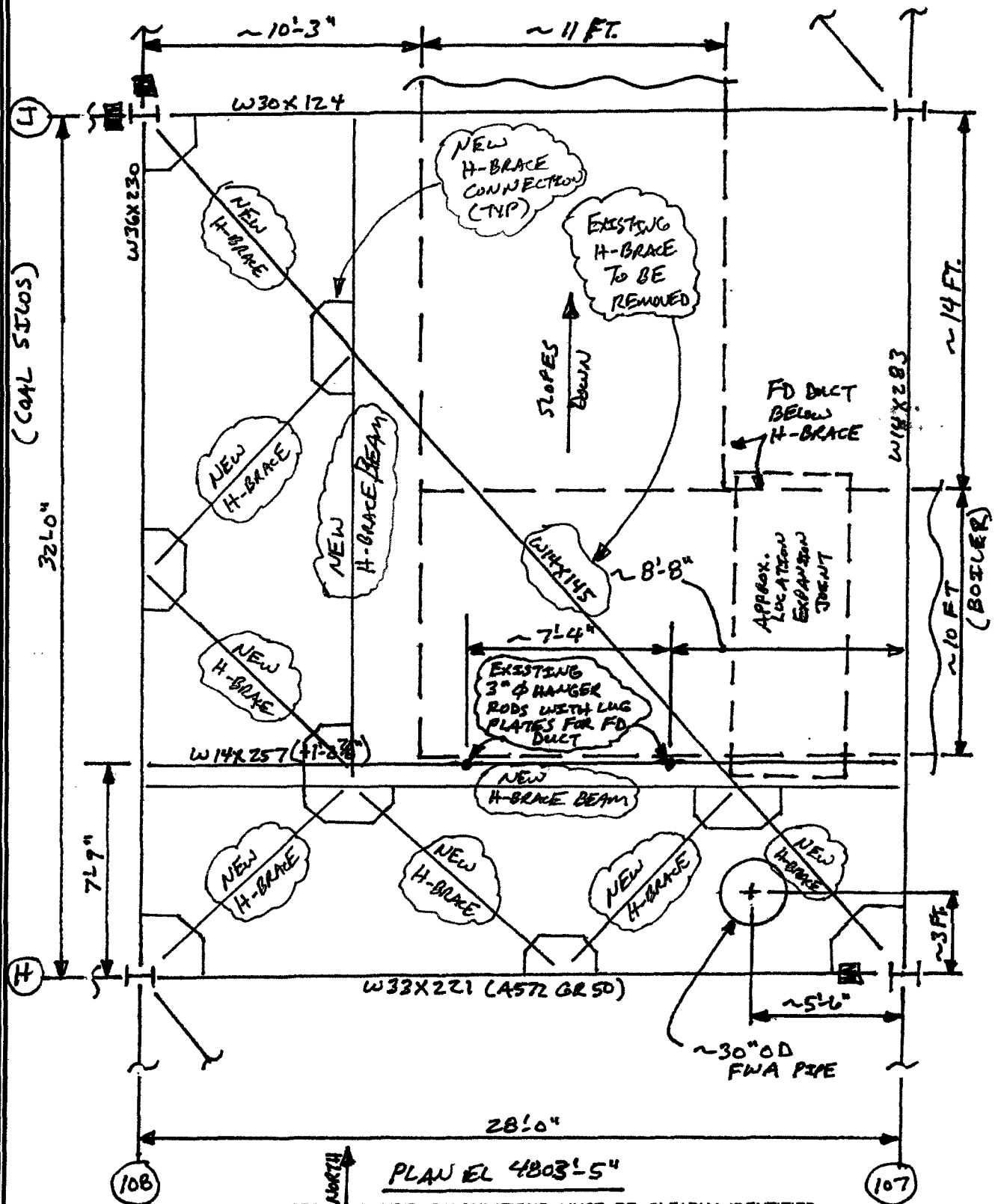


BLACK & VEATCH

Owner IPSC Computed By D.A. Dunt
Plant _____ Unit _____ Date 09 Dec 02 20
Project No. _____ File No. _____ Verified By _____
Title H-Brace Mods (Prelim) Date _____ 20
SW Corner Bay Page _____ of _____

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